



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/525,510	03/15/2000		Marcus Peinado	MSFT-0135/147325.1	9494	
41505	7590	04/26/2005		EXAMINER		
		SHBURN LLP	BACKER, FIRMIN			
ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103				ART UNIT	PAPER NUMBER	
	· · · · · · · · · · · · · · · · · · ·			3621		
				DATE MAIL ED: 04/26/200	DATE MAIL ED: 04/26/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	۲
		09/525,510	PEINADO ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Firmin Backer	3621	
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	correspondence address	
THE - Exte after - If the - If NC - Failu - Any	ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION.  nsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication.  period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed  rs will be considered timely. I the mailing date of this communication. D (35 U.S.C. § 133).	
1)⊠	Responsive to communication(s) filed on 10 .	lanuary 2005 .		
2a)□		is action is non-final.		
3)	Since this application is in condition for allowed	ance except for formal matters, p		
Disnositi	closed in accordance with the practice under ion of Claims	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.	
_	Claim(s) <u>1-46</u> is/are pending in the application	1		
	4a) Of the above claim(s) is/are withdraw			
	Claim(s) is/are allowed.	m nom oonoldoration.		
·	Claim(s) <u>1-46</u> is/are rejected.			
· ·	Claim(s) is/are objected to.			İ
	Claim(s) are subject to restriction and/o	r election requirement		
	ion Papers	r clockon roquiroment.		
9) 🗌 🤈	The specification is objected to by the Examine	r.		
10)[	The drawing(s) filed on is/are: a)□ accep	oted or b)⊡ objected to by the Exa	miner.	
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).	
11) 🔲	The proposed drawing correction filed on	is: a) approved b) disappro	oved by the Examiner.	
	If approved, corrected drawings are required in rep	ply to this Office action.		
12)	The oath or declaration is objected to by the Ex	aminer.		
Priority ι	ınder 35 U.S.C. §§ 119 and 120			
13)[	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	ı)-(d) or (f).	
a)	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority documents	s have been received.		
	2. Certified copies of the priority documents	s have been received in Applicati	on No	
* 5	3. Copies of the certified copies of the prior application from the International Bursee the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	_	
	cknowledgment is made of a claim for domesti	· · · · · · · · · · · · · · · · · · ·		າ).
а	) ☐ The translation of the foreign language pro	visional application has been rec	eived.	•
ر النازة ا Attachmen	Acknowledgment is made of a claim for domesti	c priority under 55 0.5.6. 99 120	anu/ULIZI.	
1) 🔲 Notic 2) 🔲 Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u>	5) Notice of Informal F	y (PTO-413) Paper No(s) Patent Application (PTO-152)	
S Patent and To		. 0) 🔲 Otner: .		

U.S. Patent and Trademark Offi PTO-326 (Rev. 04-01) Application/Control Number: 09/525,510

Art Unit: 3621

## Response to Arguments

Applicant's arguments with respect to claim1-46 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minear et al (U.S. Patent No. 5,983,350) in view of Douglas (U.S. PG Pub No. 2004/0010684).
- 3. As per claims 1 and 24, Minear et al teach a method/computer readable medium for releasing digital content to a rendering application the rendering application for forwarding the digital content to an ultimate destination by way of a path there between, the path being defined by at least one module, the digital content initially being in an encrypted form comprising decrypting the encrypted digital content if in fact each such defining module is to be trusted and forwarding the decrypted digital content to the rendering application for further forwarding to the ultimate destination by way of the authenticated path (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20). Minear et al fail to teach an inventive concept of performing an

authentication of at least a portion of the path determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through. However, Douglas teaches performing an authentication of at least a portion of the path determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through (*see paragraphs 0001, 0005-0008, 0017 and claims 14*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Minear et al's inventive concept to include Douglas's performing an authentication of at least a portion of the path determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through because this would have ensure communication among computer systems in an insecure network readily occurs in an authenticated manner. Further, the signed object exchange utilizes available resources in an innovative and straightforward manner, while achieving communication techniques that are resistant to replay attacks and exportable.

4. As per claims 2 and 25, Minear et al teach a method/computer readable medium further comprising scrambling the digital content upon such digital content being outputted from the rendering application to the path such that the scrambled digital content enters the user mode portion of the path, such scrambled digital content then passing through the modules that define the user mode portion of the path and transiting from the user mode portion to the kernel portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content transiting from the user mode portion to the kernel portion (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).

- 5. As per claims 3 and 26, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content by way of a de-scrambling module (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- 6. As per claims 4 and 27, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content in the kernel portion of the path (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)).
- 7. As per claims 5 and 28, Minear et al teach a method/computer readable medium comprising performing an authentication of at least a portion of the kernel portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)
- 8. As per claims 6 and 29, Minear et al teach a method/computer readable medium wherein the path includes a user mode portion and a kernel portion, the method comprising performing an authentication of at least a portion of the kernel portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)

- 9. As per claims 7 and 30, Minear et al teach a method/computer readable medium further comprising scrambling the digital content upon such digital content being outputted from the rendering application to the path such that the scrambled digital content enters the user mode portion of the path, such scrambled digital content then passing through the modules that define the user mode portion of the path and transiting from the user mode portion to the kernel portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content transiting from the user mode portion to the kernel portion (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)
- 10. As per claims 8 and 31, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content by way of a de-scrambling module (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)
- 11. As per claims 9 and 32, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content in the kernel portion of the path (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)
- 12. As per claims 10 and 33, Minear et al teach a method/computer readable medium wherein performing the authentication comprises traversing the at least a portion of the path to develop a map of each module in the path; and authenticating each module in the map (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)

13. As per claims 11 and 34, Minear et al teach a method/computer readable medium wherein performing the authentication further comprises ignoring each module not in the map (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).

- 14. As per claims 12 and 35, Minear et al teach a method/computer readable medium wherein performing the authentication comprises authenticating an initial module determining all first destination modules that receive data from such initial module authenticating each such first destination module, determining all second destination modules that receive data from each such first destination module, iteratively repeating the authenticating and determining steps for third, fourth, fifth, etc. destination modules until each module in such at least a portion of the path has been determined and authenticated (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- 15. As per claims 13 and 36, Minear et al teach a method/computer readable medium wherein authenticating the initial module comprises authenticating a module in the at least a portion of the path that is to receive the digital content before any other module in the at least a portion of the path, whereby the initial module leads to fully determining all other modules that define the at least a portion of the path (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- 16. As per claims 14 and 37, Minear et al teach a method/computer readable medium comprising employing a database device to keep track of all modules determined to be in the at

least a portion of the path, whereby already-determined modules in the at least a portion of the path can be recognized (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).

- 17. As per claims 15 and 38, Minear et al teach a method/computer readable medium wherein performing an authentication comprises for each module in the at least a portion of the path: receiving from the module a certificate as issued by a certifying authority; and determining from the received certificate whether such received certificate is acceptable for purposes of authenticating the module (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- 18. As per claims 16 and 39, Minear et al teach a method/computer readable medium wherein performing an authentication further comprises checking a revocation list to ensure that the received certificate has not been revoked (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- 19. As per claims 17 and 40, Minear et al teach a method/computer readable medium further comprising receiving the revocation list from a certifying authority; storing the received revocation list in a secure location (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- 20. As per claims 18 and 41, Minear et al teach a method/computer readable medium wherein performing an authentication further comprises refusing to decrypt the encrypted digital

content if at least one module in the at least a portion of the path fails to provide an acceptable certificate (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).

Page 8

- 21. As per claims 19 and 42, Minear et al teach a method/computer readable medium wherein performing an authentication further comprises decrypting the encrypted digital content if all the modules in the at least a portion of the path provide an acceptable certificate (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- 22. As per claims 20 and 43, Minear et al teach a method/computer readable medium wherein performing an authentication further comprises, for each module in the at least a portion of the path that fails to provide an acceptable certificate defining a sub-portion of the path including the non-providing module, scrambling the digital content upon such digital content entering the tunnel portion of the path, such scrambled digital content then passing through the modules that define the sub-portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content exiting from the sub-portion of the path; and declaring the sub-portion trustworthy (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)).
- 23. As per claims 21 and 44, Minear et al teach a method/computer readable medium wherein the path includes a user mode portion and a kernel portion, the method comprising performing an authentication of the user mode portion of the path and of the kernel portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle

the digital content passing there through (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).

- As per claims 22 and 45, Minear et al teach a method/computer readable medium wherein the path includes a tunneled portion, the method further comprising scrambling the digital content upon such digital content entering the tunneled portion of the path, such scrambled digital content then passing through the modules that define the tunneled portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content exiting from the tunneled portion of the path, and wherein performing an authentication comprises performing an authentication of at least a portion of the path external to the tunneled portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through, an authentication of the tunneled portion being unnecessary (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20).
- As per claims 23 and 46, Minear et al teach a method/computer readable medium wherein the path includes a user mode portion, a kernel portion, and a tunneled portion in the user mode portion, the method further comprising scrambling the digital content upon such digital content entering the tunneled portion of the user mode portion of the path, such scrambled digital content then passing through the modules that define the tunneled portion of the user mode portion of the path, and de-scrambling the scrambled digital content upon such scrambled digital content exiting from the tunneled portion of the user mode portion of the path and wherein performing an authentication comprises performing an authentication of at least a

portion of the path external to the tunneled portion of the user mode portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through, an authentication of the tunneled portion being unnecessary (see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20)

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Firmin Backer whose telephone number is (703) 305-0624. The examiner can normally be reached on Mon-Thu 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (703) 305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Firmin Backer
Primary Examin

Primary Examine

Art Unit 3621